ABSTRACT :

Hydatidiform mole is the most common form of gestational trophoblastic disease occurring one in every 1000 pregnancies which results from abnormal fertilization and characterized by hydropic swelling of placental villi and trophoblastic hyperplasia.

Histopathologically there is considerable interobserver and intraobserver variability in distinguishing hydropic abortion from hydatidiform mole and complete hydatidiform mole from partial hydatidiform mole. The distinction is important because approximately 10-30% of complete mole and 0.5-5% of partial moles can progress to persistent trophoblastic disease.

In addition, distinction of hydatidiform mole from Non molar pregnancy can be problematic in several situations, including:

(a) products of conception specimens (POCs) with abnormal villous morphology (a nonmolar type of villous abnormality having some morphologic features suggestive of a PHM (partial hydatidiform mole) but lacking the diandric triploidy required for a definitive diagnosis of PHM, sometimes attributable to other genetic abnormalities such as trisomy)[1,2];

(b) early nonmolar abortuses with prominent trophoblastic hyperplasia; (c) hydropic abortuses; and (d) mosaic/chimeric conceptions.[3,4]

Immunohistochemical study by using the markers

- p57 will aid in distinguishing hydropic abortion from hydatidiform mole and complete hydatidiform mole from partial hydatidiform mole.
- p21 will aid in assessing the malignant potential of molar pregnancy.

KEY WORDS:

Gestational trophoblastic disease, immunohistochemistry, p57, p21.